

Maine State Library
Maine State Documents

Environmental Protection Documents

Environmental Protection

1-31-2013

Hydropower Projects in Maine, 2012

Maine Department of Environmental Protection

Follow this and additional works at: http://statedocs.maine.gov/dep_docs

Recommended Citation

Maine Department of Environmental Protection, "Hydropower Projects in Maine, 2012" (2013). *Environmental Protection Documents*. Paper 35.
http://statedocs.maine.gov/dep_docs/35

This Document is brought to you for free and open access by the Environmental Protection at Maine State Documents. It has been accepted for inclusion in Environmental Protection Documents by an authorized administrator of Maine State Documents. For more information, please contact statedocs@maine.gov.

**Report to the Joint Standing Committee on Environment
and Natural Resources
126th Legislature, First Session**

2012 Hydropower Projects in Maine

January 2013

Contact: Kathy Howatt, Hydropower Coordinator
Phone: (207) 446-2642



MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION
17 State House Station | Augusta, Maine 04330-0017
www.maine.gov/dep

Executive Summary

In a letter dated March 12, 2012, the Joint Standing Committee on Environment and Natural Resources (Committee) directed that the Maine Department of Environmental Protection (Department), the Maine Emergency Management Agency, and the Governor's Office of Energy Independence and Security, cooperatively work on updating the "State of Maine Hydropower Licensing and Relicensing Status Report," dated May 1993, which was prepared by the former State Planning Office.

In planning to meet this directive, Department research has led to the conclusion that the 1993 report has become part of the report entitled, Hydropower Projects in Maine. Starting in the year 2000, and approximately every two years thereafter, the Department has generated this report on all hydropower projects affecting lands and waters within the State of Maine. While, there was no definitive information linking these two reports, there appeared to be a significant amount of overlap in the information provided in both reports.

Included within this report are numerous Maine related data tables for various hydropower projects including: Federal Energy Regulatory Commission (FERC) approved hydropower projects; FERC issued preliminary permits for HydroKinetic projects; FERC pending licenses, relicenses, and exemptions; inactive FERC hydropower projects; inactive FERC HydroKinetic projects; FERC non-jurisdictional hydropower projects; other State jurisdictional hydropower projects. The information offered within this report will be helpful to the answer the questions raised during the Committee's deliberations in relation to LD 1718 during the second session of the 125th legislature.

The data along with a listing of relevant statutory sections, Department rule, and dam removal policies provides a clear picture of the status of hydropower licensing and relicensing in the State. A list of relevant statutory sections has been included in the appendices for the Committee's reference.

I. Introduction

This report presents information on all hydropower projects affecting lands and waters within the State of Maine. The information contained herein has been compiled from various public records and personal contacts as a planning and tracking tool for use by state resource agencies, and other interested groups and individuals. While every effort has been made to ensure that the information present is accurate and complete, this report may contain unintended errors.

This report contains the following lists of projects:

- FERC Approved Hydropower Projects in Maine
- FERC Issued Preliminary Permits for HydroKinetic Projects in Maine
- FERC Pending Licenses, Relicensing, and Exemptions
- Inactive FERC Hydropower Projects in Maine
- Inactive FERC HydroKinetic Projects in Maine
- FERC Non-Jurisdictional Hydropower Projects in Maine
- Other State Jurisdictional Hydropower Projects in Maine

Summary of Hydropower Projects as of July 1, 2012				
	Project Count	1979 Capacity (KW)	Post-1979 Capacity Increase (KW)	Total Installed Capacity (KW)
FERC Approved Projects	101	513,082	225,855	738,937
FERC Non-Jurisdictional Projects	14	23,980	0	23,980
Totals	115	537,062	225,855	762,917

When reviewing the tables included within this report, there are several notes that should be kept in mind. They are as follows:

1. Several projects included in this report, while utilizing dams and/or impoundments located within the State of Maine's boundaries on the Salmon Falls River and the Androscoggin River, are actually generating power in New Hampshire. These projects are identified by an asterisk (*) following the FERC project number.

2. All approved capacity is constructed and on-line, except as noted below.
3. The following approved expansions have not been completed: Weston Project, No. 2325 (1980 KW); Veazie Project, No. 2403 (8,000 KW); and Milford Project, No. 2534 (1,600 KW).
4. The following projects are currently inoperable and are shut down: Boston Felt Project, No. 4542; Frankfort Project, No. 6618; and Gardiner Brook Project, No. 9421.
5. The following projects are currently shut down for economic reasons: Days Mill Project, No. 6684; Gilman Stream Project, No. 7473; Foss Mill Project, No. 7979; and Abbots Mill Project, No. 8505.
6. The following projects are currently pending for relicensing and are operating under annual licenses: West Branch Storage Project, No. 2618; Forest City Storage Project, No. 2660; and Eel Weir Project, No. 2984.
7. The new license for the Flagstaff Project, No. 2612, has been stayed by FERC based on the denial of Section 401 water quality certification by the Board of Environmental Protection.
8. FERC Order accepting surrender of licenses with dam removal and/or dismissing applications for new licenses has been issued on 6/16/2010 for the following projects: Great Works Project, No. 2312 (DEP decision 7/16/2010); Veazie Project, No. 2403 (DEP decision 7/14/2010); and Howland Project, No. 2721.(DEP decision 1/26/2010).

II. FERC Approved Projects

FERC approved hydro projects operate under the terms of a license or an exemption. These projects are listed in the tables below.

LICENSE (L): Licenses are issued under the Federal Power Act for the development or continued operation of non-federal water power projects. Licenses are valid for a maximum of 50 years. Under FERC's regulations, a licensee must file to relicense a project no later than 2 years prior to the license expiration date. When a license expires, FERC may deny license renewal, may issue a new license to the original licensee or a new licensee, or may recommend to Congress that the United States acquire the project. If action has not been taken by the license expiration date, the project will operate on an annual license until relicensing action is taken.

EXEMPTION (E): Exemptions from the licensing provisions of the Federal Power Act are issued in perpetuity for the development of non-federal water power projects having a capacity of 5,000 KW or less and utilizing an existing dam or natural water feature. Exemptions are subject to conditions imposed by fish and wildlife agencies.

FERC Approved Hydropower Projects in Maine

FERC Number	Project Name	1979 Capacity	Post-1979 Capacity Increase	Total Capacity (KW)	River/Stream Impounded	Location (Municipality/Unorganized Township)	Status (L/E)	Owner (Licensee/Exemptee)	Expiration Date
2142	Harris	76600	0	76600	Kennebec	T1 R6	L	FPL Energy Maine LLC	10/31/2036
2194	Bar Mills	4000	0	4000	Saco	Hollis	L	FPL Energy Maine LLC	07/31/2048
2283	Gulf Is./Deer Rips	29240	7625	36467	Androscoggin	Lewiston/Auburn	L	FPL Energy Maine LLC	07/31/2036
	Gulf Island			25830					
	Deer Rips			10638					
2284	Brunswick	1473	17527	19000	Androscoggin	Brunswick/Topsham	L	FPL Energy Maine LLC	02/28/2029
2302	Lewiston Falls	8364	28440	36354	Androscoggin	Lewiston/Auburn	L	FPL Energy Maine LLC	08/31/2026
	Monty Station			28440					
	Canal System①			7314					
2322	Shawmut	4650	4000	8650	Kennebec	Fairfield	L	FPL Energy Maine LLC	01/31/2021
2325	Weston	12770	1980	14750	Kennebec	Skowhegan	L	FPL Energy Maine LLC	10/31/2036
2329	Wyman	72000	18.900	90900	Kennebec	Moscow/Pleasant Ridge Plt.	L	FPL Energy Maine LLC	10/31/2036
2333	Rumford Falls	34770	4580	39350	Androscoggin	Rumford/Mexico	L	Rumford Falls Hydro LLC	09/30/2024
	Upper Station			26550					
	Lower Station			12800					
2355	Williams	14500	0	14500	Kennebec	Embden/Solon	L	FPL Energy Maine LLC	12/31/2017
2364	Abenaki②	3650	15150	18800	Kennebec	Anson/Madison	L	Madison Paper Industries	04/30/2054
2365	Anson	6000	3000	9000	Kennebec	Anson/Madison	L	Madison Paper Industries	04/30/2054
2367	Aroostook River	800	0	800	Aroostook	Caribou/T7R9	L	Algonquin Northern Maine Gen Co.	12/31/2044
	Millinocket Lake			Storage					
	Caribou			800					
2368	Squa Pan	1500	0	1500	Squa Pan	Masardis	L	Algonquin Northern Maine Gen Co.	12/03/2021

FERC Approved Hydropower Projects in Maine - Continued

FERC Number	Project Name	1979 Capacity	Post-1979 Capacity Increase	Total Capacity (KW)	River/Stream Impounded	Location (Municipality/Unorganized Township)	Status (L/E)	Owner (Licensee/Exemptee)	Expiration Date
2375	Riley/Jay/Livermore	9300	10425	19725	Androscoggin	Jay/Riley/Livermore	L	Verso Androscoggin LLC	09/15/2048
	Riley			7800					
	Jay			3125					
	Livermore			8800					
2458	Penobscot Mills	48576	22000	70576	West Branch Penobscot	Millinocket et. al.	L	Great Lakes Hydro America LLC	10/01/2026
	North Twin			6972					
	Millinocket③			35782					
	Dolby			20886					
	East Millinocket			6936					
	Millinocket Lake			Storage					
2492	Vanceboro	0	0	Storage	St. Croix	Vanceboro	L	DomtarMaine LLC	03/01/2016
2519	North Gorham	2250	0	2250	Presumpscot	Gorham/Windham	L	FPL Energy Maine LLC	12/31/2034
2520	Mattaceunk	19200	0	19200	Penobscot	Mattawamkeag/Woodville	L	Great Lakes Hydro America LLC	08/31/2018
2527	Skelton	16800	0	16800	Saco	Dayton/Buxton	L	FPL Energy Maine LLC	01/31/2038
2528	Cataract	7550	0	6650	Saco	Biddeford/Saco	L	FPL Energy Maine LLC	11/30/2029
	East Channel			6650					
	West Channel④			0					
	Springs/Bradbury			0					
2529	Bonny Eagle	7200	0	7200	Saco	Hollis/Standish	L	FPL Energy Maine LLC	01/31/2038
2560	Hiram	2400	8500	10900	Saco	Hiram/Baldwin	L	FPL Energy Maine LLC	11/30/2022
2531	West Buxton	6625	1500	8125	Saco	Buxton/Hollis	L	FPL Energy Maine LLC	12/31/2017

FERC Approved Hydropower Projects in Maine - Continued

FERC Number	Project Name	1979 Capacity	Post-1979 Capacity Increase	Total Capacity (KW)	River/Stream Impounded	Location (Municipality/Unorganized Township)	Status (L/E)	Owner (Licensee/Exemptee)	Expiration Date
2534	Milford	6400	1600	8000	Penobscot	Milford/Old Town	L	Black Bear Hydro Partners LLC	
	Milford			8000					
	Gilman Falls			0					
2555	Automatic (M4)	800	0	800	Messalonskee	Waterville	L	Kennebec Water District	06/30/2036
2556	Messalonskee	6200	0	6200	Messalonskee	Waterville/Oakland	L	Messalonskee Stream Hydro LLC	06/30/2036
	Union Gas (M5)			1800					
	Rice Rips (M3)			1600					
	Oakland (M2)			2800					
	Messalonskee Lake			Storage					
2572	Ripogenus	37530	0	37350	West Branch Penobscot	T3 R11	L	Great Lakes Hydro America LLC	10/01/2026
2574	Lockwood	4880	1670	6550	Kennebec	Waterville/Winslow	L	Merimil Ltd. Partnership	10/31/2036
2600	West Enfield⑤	3500	9500	13000	Penobscot	Enfield/Howland	L	Bangor Pacific Hydro Associates	05/31/2024
2611	Hydro-Kennebec	3730	11703	15433	Kennebec	Waterville/Winslow	L	Hydro Kennebec LLC	09/30/2036
2612	Flagstaff	0	0	Storage	Dead	T3 R4	L	FPL Energy Maine LLC	02/28/2036
2615	Brassua	0	4180	4180	Moose	Rockwood Twp.	L	Owners of Brassua Dam; Brassua Hydro Ltd. Partnership	03/31/2012
2618	West Branch	0	0	Storage	West Branch St. Croix	West Grand Lake	L	Domtar Maine LLC	09/30/2000
	W.Grand Lake			Storage					
	Sysladopsis Lake			Storage					
2634	GLHA Storage	0	0	Storage	West Branch Penobscot	Seboomook et. al.	L	Great Lakes Hydro America LLC	11/31/2054
	Ragged Lake			Storage					
	Caucongomoc L.			Storage					
	Seboomook Lake			Storage					

FERC Approved Hydropower Projects in Maine - Continued

FERC Number	Project Name	1979 Capacity	Post-1979 Capacity Increase	Total Capacity (KW)	River/Stream Impounded	Location (Municipality/Unorganized Township)	Status (L/E)	Owner (Licensee/Exemptee)	Expiration Date
	Canada Falls Lake			Storage					
	Penobscot Lake			Storage					
	Harrington Lake			Storage					
	Loon Lake			Storage					
	Long Pond			Storage					
	Dole Pond			Storage					
2660	Forest City	0	0	Storage	East Branch St. Croix	Forest City	L	Domtar Maine LLC	08/31/2000
2666	Medway	3440	0	3440	West Branch Penobscot	Medway	L	Black Bear Hydro Partners LLC	03/31/2029
2671	Moosehead Lake	0	0	Storage	Kennebec	Big Squaw Twp/ Taunton & Rayham Academy Grant	L	Kennebec Water Power Co.	10/31/2036
2710	Orono	2332	3738	6070	Stillwater	Orono	L	Black Bear Hydro Partners LLC	11/30/2045
2712	Stillwater	1950	2229	4179	Stillwater	Old Town	L	Black Bear Hydro Partners LLC	04/01/2038
2727	Ellsworth	8900	0	8900	Union	Ellsworth	L	Black Bear Hydro Partners LLC	12/31/2018
	Ellsworth			8900					
	Graham Lake			Storage					
2804	Goose	0	369	369	Goose	Belfast	L	Goose River Hydro Co.	02/29/2020
	CMP Dam			200					
	Mill Dam			94					
	Kelly Dam			0					
	Mason Dam			75					
	Swan Lake			Storage					
2808	Barkers Mill Lower	0	1500	1500	Little Androscoggin	Auburn	L	KEI Power Management LLC	01/31/2019
2809	American Tissue	0	1000	1000	Cobbosseecontee Stream	Gardiner	L	KEI Power Management LLC	04/30/2019

FERC Approved Hydropower Projects in Maine - Continued

FERC Number	Project Name	1979 Capacity	Post-1979 Capacity Increase	Total Capacity (KW)	River/Stream Impounded	Location (Municipality/Unorganized Township)	Status (L/E)	Owner (Licensee/Exemptee)	Expiration Date
2897	Saccarappa	1350	0	1350	Presumscot	Westbrook	L	S.D. Warren Co.	09/30/2043
2931	Gambo	1900	0	1900	Presumscot	Gorham/Windham	L	S.D. Warren Co.	09/30/2043
2932	Mallison Falls	800	0	800	Presumscot	Gorham/Windham	L	S.D. Warren Co.	09/30/2043
2941	Little Falls	1000	0	1000	Presumscot	Gorham/Windham	L	S.D. Warren Co.	09/30/2043
2942	Dundee	2400	0	2400	Presumscot	Gorham/Windham	L	S.D. Warren Co.	09/30/2043
2984	Eel Weir	1800	0	1800	Presumscot	Standish/Windham	L	S.D. Warren Co.	03/31/2004
3133	Errol	0	2010	2010	Androscoggin	Magalloway/Upton	L	Errol Hydroelectric Co. LLC; FPL Energy Maine LLC	08/29/2023
3428	Worumbo	900	18500	19400	Androscoggin	Lisbon/Durham	L	Miller Hydro Group	11/30/2025
3444	Rocky Gorge	0	500	500	Great Works	South Berwick	E	Rocky Gorge Corp.	-----
3562	Barkers Mill Upper	0	950	950	Little Androscoggin	Auburn	L	KEI Power Management LLC	07/31/2023
3777	Rollinsford	0	1492	1492	Salmon Falls	South Berwick	L	Town of Rollinsford, NH	08/31/2021
3984	Somersworth	0	1500	1500	Salmon Falls	Berwick	L	General Electric Co.	08/31/2021
3985	South Milton	700	300	1000	Salmon Falls	Lebanon	E	Salmon Falls River Hydro Corp.	-----
4026	North Rochester	0	250	250	Salmon Falls	Berwick	E	Spaulding Ave. Industrial Complex	-----
4202	Aziscohos	0	5311	5311	Magalloway	Lincoln Plt.	L	Androscoggin Reservoir Co,	03/31/2025
4293	Pumpkin Hill	0	1000	1000	Passadumkeag	Lowell	L	KEI Power Management LLC	09/30/2023
4413	Waverly Avenue	0	700	700	Sebasticook	Pittsfield	E	Express Hydro Services	-----
	Kennebago	0	900	900	Kennebago	Stetsontown Plt.	E	Kennebago Corp.	-----
	Mahaney Dam								
	Kennebago Falls								
4451	Lower Great falls	0	1289	1289	Salmon Falls	Berwick	L	Somersworth Hydro Co.; City of Somersworth, NH	03/31/2022
4542	Boston Felt	0	150	150	Salmon Falls	South Lebanon	E	Bacon Felt Company, Inc.	-----

FERC Approved Hydropower Projects in Maine - Continued

FERC Number	Project Name	1979 Capacity	Post-1979 Capacity Increase	Total Capacity (KW)	River/Stream Impounded	Location (Municipality/Unorganized Township)	Status (L/E)	Owner (Licensee/Exemptee)	Expiration Date
4784	Pejepscot	2500	11380	11380	Androscoggin	Topsham/Brunswick	L	Topsham Hydroelectric Generating Facility Trust	08/31/2022
5073	Benton Falls	0	4468	4468	Sebastianook	Benton	L	Benton Falls Hydro Associates	02/28/2034
5362	Lower Mousam	600	0	600	Mousam	Kennebunk	L	Kennebunk Light & Power Co.	03/31/2022
	Kesselen			150					
	Twine Mills			300					
	Dane Perkins			150					
5613	Brown's Mill	0	550	550	Piscataquis	Dover-Foxcroft	E	KEI Power Management LLC	-----
5647	Milo	0	695	695	Sebec	Milo	E	KEI Power Management LLC	-----
5912	Dover Upper Dam	0	300	300	Piscataquis	Dover-Foxcroft	E	Moosehead Energy Inc.	-----
6398	Hackett Mills	0	485	485	Little Androscoggin	Minot	L	Hackett Mills Hydro associates	08/31/2024
6618	Frankfort	0	400	400	Marsh Stream	Frankfort	E	Express Hydro Services	-----
6684	Days Mill	0	30	30	Kennebunk	Arundel	E	James Quincy	-----
7189	Green Lake	0	500	500	Reed Brook	Ellsworth	L	Green Lake Water Power Co.	04/30/2024
7253	Sebec	0	867	867	Sebec	Sebec	E	Ampersand Sebec Lake Hydro LLC	-----
7473	Gilman Stream	0	120	120	Gilman Stream	North New Portland	E	J Bertl/V. LaNoce	-----
7591	Wight Brook	0	30	30	Wight Brook	Newry	E	Small Hydro East	-----
7979	Foss Mill	0	15	15	Marsh Stream	Brooks	E	Lesia Sochor	-----
8277	Otis	1100	9250	10350	Androscoggin	Chisholm	E	Verso Androscoggin LLC	09/15/2048
8417	Sparhawk	0	270	270	Royal	Yarmouth	E	Sparhawk Mill Associates	-----
8450	Stoney Brook	0	35	35	Stoney Brook	Newry	E	Small Hydro East	-----
8505	Abbots Mills	0	40	40	Concord Stream	Rumford	E	J. Bertl/V. LaNoce	-----

FERC Approved Hydropower Projects in Maine - Continued

FERC Number	Project Name	1979 Capacity	Post-1979 Capacity Increase	Total Capacity (KW)	River/Stream Impounded	Location (Municipality/Unorganized Township)	Status (L/E)	Owner (Licensee/Exemptee)	Expiration Date
8640	Seabright	0	94	94	Megunticook	Camden	E	Town of Camden	-----
8736	Pioneer	0	300	300	Sebastiancook	Pittsfield	E	Christopher Anthony	-----
8788	Ledgemere	200	200	400	Little Ossipee	Limerick/Waterboro	E	Ledgemere Hydro LLC	-----
8791	Starks	0	35	35	Lemon Stream	Starks	E	Raymond Fortier	-----
9079	Upper Spears	0	50	50	Spears Stream	Peru	E	Raymond Fortier	-----
9340	Kezar Falls	850	150	1000	Ossipee	Porter/Parsonsfield	L	Kezar Falls Hydro LLC	09/30/2030
	Kezar Falls Upper			350					
	Kezar Falls Lower			650					
9411	Biscoe Falls	0	93	93	Little Androscoggin	West Paris	E	John Crouch & Sons	-----
9421	Gardiner Brook	0	50	50	Gardiner Brook	Andover	E	David Percival	-----
11006	Upper Androscoggin	1695	0	1695	Androscoggin	Lewiston	L	City of Lewiston	08/31/2026
11132	Eustis	250	0	250	North Branch Dead	Eustis	L	KEI Power Management LLC	11/31/2026
11163	South Berwick	1200	0	1200	Salmon Falls	South Berwick	L	Consolidated Hydro of New Hampshire, Inc.	11/30/2037
11365	Swans Falls	350	470	820	Saco	Fryeburg	E	Saco River Hydro LLC	-----
11472	Burnham	1000	0	1000	Sebastiancook	Pittsfield	L	KEI Power Management LLC	10/31/2036
11482	Marcal	1310	0	1310	Little Androscoggin	Mechanic Falls	L	KEI Power Management LLC	06/30/2037
11566	Damariscotta	500	0	500	Damariscotta	Newcastle	L	KEI Power Management LLC	11/31/2033
11834	Upper & Middle Dams	0	0	Storage	Rapid	Richardsontown Twp.	L	FPL Energy Maine LLC	11/31/2052
12629	Miltown Hydro Project	0	350	350	Swift	Mexico	E	Miltown Hydroelectric LLC	-----
12711	Cobscook Bay Tidal Energy	0	300	300	Cobscook		L	ORPC Maine LLC	01/31/2020

FERC Approved Hydropower Projects in Maine - Continued

FERC Number	Project Name	1979 Capacity	Post-1979 Capacity Increase	Total Capacity (KW)	River/Stream Impounded	Location (Municipality/Unorganized Township)	Status (L/E)	Owner (Licensee/Exemptee)	Expiration Date
13164	Veazie Energy Recovery	0	75	75	N/A	Veazie	E	Bangor Water District	-----
	TideWorks Project	0	500	500	Sasanoa	Georgetown	E	TideWorks LLC	

FERC Approved Hydropower Projects in Maine Table Notes:

- ① Lewiston Falls (Canal System), FERC No. 2302: The 450 KW Bates No. 2 station was retired in 1998.
- ② Abenaki, FERC No. 2364: In 1988, the four hydromechanical turbines (rated at 9,100 horsepower) used to power pulpwood grinders for the Madison Paper Mill was converted to electric generation (rated at 10,500 kW).
- ③ Penobscot Mills (Millinocket), FERC No. 2458: In 1994, the five hydromechanical turbines (rated at 29,750 horsepower) used to power woodpulping operations at the Millinocket Paper Mill were converted to electric generation (rated at 22,000 KW).
- ④ Cataract (West Channel), FERC No. 2528: The 900 KW NKL station at the West Channel Dam was retired in 1997.
- ⑤ West Enfield, FERC No. 2600: The 3,500 KW Stanford Station was retired and removed in 1988.
- ⑥ Hydro-Kennebec, FERC No. 2611: The old powerhouse, with 3,730 KW installed capacity, was retired in 1998.
- ⑦ Veazie Energy Recovery, FERC No. 13164: The generating equipment is located in a water supply conduit.
- ⑧ Milltown Hydroelectric LLC acquired the Corriveau Hydro facility from the F&B Wood Corporation; DEP license transferred 6/27/2011

III. FERC Issued Preliminary Permits

A preliminary permit is issued for up to three years. The preliminary permit does not authorize construction; it maintains priority of the application for a license (i.e., guaranteed first-to-file status) while the permittee studies the site and prepares to apply for a license. The permittee must submit periodic reports on the status of its studies. It is not necessary to obtain a permit in order to apply for, or receive a license.

See tables below for a listing of FERC Issued Preliminary Permits.

FERC Issued Preliminary Permits for HydroKinetic Projects in Maine

FERC Number	Project Name	1979 Capacity	Post-1979 Capacity Increase	Total Capacity (KW)	River/Stream Impounded	Location (Municipality/Unorganized Township)	Status (L/E)	Owner (Licensee/Exemptee)	Expiration Date
12680	Western Passage OCGEN	-----	1200	1200	Atlantic Ocean	Eastport	PP	Ocean Renewable Power Co. of Maine	12/31/2013
12704	Half Moon Tidal Energy	-----	9000	9000	Passamaquoddy Bay	Eastport/Perry	PP	Tidewater Associates	11/30/2013
13345	Homeowner Tidal Power Elect Gen	-----	60	60	Kennebec River	Phippsburg	PP	Shearwater Design Inc.	06/30/2012
13801	Kendall Head Tidal Energy	-----	1200	1200	Atlantic Ocean	Eastport	PP	Ocean Renewable Power Co. Maine LLC	12/31/2013
13884	Pennamaquan Tidal Power Plant	-----	21100	21100	Pennamaquan River	Pembroke	PP	Pennamaquan Tidal Power LLC	02/28/2014
14330	Treat Island Tidal	-----	2250	2250	Passamaquoddy Bay	Eastport/Treat Island	PP	ORPC Maine LLC	03/31/2015
14331	Lubec Narrows Tidal	-----	600	600	Lubec Narrows and Johnson Bay	Lubec	PP	ORPC Maine LLC	03/31/2015

IV. FERC Pending Licenses, Reliceses, and Exemptions

At least 5 years before a license expires, the licensee must file a notice of intent declaring whether or not it intends to seek a new license (relicense) for its project. At least 2 years before a license expires, the licensee must file an application for new license.

FERC Pending Licenses, Reliceses, and Exemptions

Docket Number	Project Name	Licensee	File Date	Application Type	Proposed Capacity (MW)
2615	Brassua①	Owners of Brassua Dam; Brassua Hydro LTD Partnership	04/09/2012	Relicense	4.180
2618	West Branch	Domtar, Maine Corporation	03/19/2009	Jurisdictional Determination/Relicense	Storage
2660	Forest City	Domtar, Maine Corporation	11/05/2009	Jurisdictional Determination/Relicense	Storage
02984	Eel Weir	S. D. Warren Company	03/29/2002	Relicense	1.800
13656	TideWorks	TideWorks. LLC	01/15/2010	5-MW Exemption	0.500
XXXXX	Freedom Falls Hydropower Project	Freedom Falls LLC	06/01/2012	5-MW Exemption	0.383

① FERC Authorization for Continued Project Operation dated 04/09/2012

V. Inactive FERC Projects

Inactive FERC hydro projects are projects that at one time were approved by FERC but for which renewal of the project license has been subsequently denied or the project license or exemption has been subsequently revoked, surrendered or otherwise terminated. In most cases, the approved project was never built. In a few cases, a previously constructed and operating project has been shut down due to economic or environmental considerations.

The tables containing a listing of Inactive FERC Projects are located below.

Inactive FERC Hydropower Projects in Maine

FERC Number	Project Name	Approved Capacity (kW)	River/Stream Impounded	Location (Municipality/Unorganized Township)	Status (L/E)	Owner (Licensee/Exemptee)	Action
2312	Great Works⑤	7900	Penobscot	Old Town	L	PPL Great Works, LLC	Surrendered 06/16/2010
2389	Edwards①②	3500④	Kennebec	Augusta	L	Edwards Manufacturing Co.; City of Augusta	Renewal Denied 11/25/1997
2403	Veazie⑤	8400	Penobscot	Veazie/Eddington	L	Penobscot River Restoration Trust	Surrendered 06/16/2010
2552	Fort Halifax①②	1500④	Sebasticook	Winslow	L	FPL Energy Maine Hydro LLC	Surrendered 01/23/2004
2721	Howland⑤	1875	Piscataquis	Howland	L	PPL Maine, LLC	Surrendered 06/16/2010
4304	Columbia Falls①②	500	Pleasant	Columbia Falls	E	K.W. Inc.	Surrendered 02/6/1990
4727	Grist Mill①②	200	Souadabscook Stream	Hampden	E	Maine Energy Partners	Surrendered 08/27/1998
5399	News Mills①	116	Cobbosseecontee Stream	Gardiner	E	Gardiner Water District	Surrendered 05/16/1996
5598*	Milton Leatherboard	600	Salmon Falls	Lebanon	L	East Coast Engineering	Terminated 06/10/1986
5872*	Milton Mills	263	Salmon Falls	Acton	E	Millenium Power	Revoked 01/17/1989
6132	West Winterport①	70	Marsh Stream	Winterport/Frankfort	E	John Jones	Surrendered 06/28/2002
6588*	Milton Three-Ponds	180	Salmon Falls	Lebanon	L	James Rea	Surrendered 01/27/1989
6910	Megunticook	60	Megunticook	Camden	E	Lake Megunticook Association	Revoked 12/19/1984
7118	Smelt Hill①②	1125	Presumpscot	Falmouth	E	Central Maine Power	Surrendered 07/05/2002
8321	Thurston Mill①③	350	Swift	Mexico	E	Murray Thurston	Surrendered 12/10/1997
8385	Cumberland Mills	1800	Presumpscot	Westbrook	E	S.D. Warren	Surrendered 06/24/1986

Inactive FERC Hydropower Projects in Maine - Continued

FERC Number	Project Name	Approved Capacity (KW)	River/Stream Impounded	Location (Municipality/Unorganized Township)	Status (L/E)	Owner (Licensee/Exemptee)	Action
8969	Crocker Pond	50	Crocker Pond	Dennistown Plt.	E	Islandia, Inc.	Revoked 12/26/1989
9102	Holmes Mill	70	Passagassawakeag	Brooks	E	Donald Head	Revoked 05/12/1992
9384	White's Brook①	60	White's Brook	Riley/Gilead	E	David Head	Surrendered 03/23/1999
10007	Bunny Run	10	Unnamed	Mason	E	Steven Crane	Revoked 06/15/1990
10127	Pineland	25	Branch Brook	Newry	E	Clifford Akers	Surrendered 05/24/1990
10128	St. George	100	St. George	Liberty	E	Ivan Davis	Surrendered 01/4/1990
10167	Stoneybrook	35	Stoneybrook	Paris	E	Vincent George	Revoked 11/20/1991
11433	Sandy River①②	547④	Sandy	Madison	L	Town of Madison Electric Works	Surrendered 05/01/2006

- ① Project was approved, constructed and on-line prior to becoming inactive.
- ② Project dam has been removed.
- ③ Project has subsequently been brought back on-line under new project approval.
- ④ Installed generating capacity at time of project decommissioning and dam removal.
- ⑤ Penobscot River Restoration Project. Great Works and Veazie Dams to be removed; fishway to be constructed around Howland dam

VI. Inactive FERC HydroKinetic Projects

Inactive FERC HydroKinetic projects include projects for which applications for preliminary permits were rejected, denied, or withdrawn; as well as projects that at one time were approved by FERC but for which the preliminary permit has been surrendered. A HydroKinetic project is one that generates electricity from waves or directly from the flow of water in ocean currents, tides, or inland waterways.

The tables containing data concerning inactive FERC HydroKinetic projects are listed below.

Inactive FERC HydroKinetic Projects in Maine

FERC Number	Project Name	Approved Capacity (KW)	River/Stream Impounded	Location (Municipality/Unorganized Township)	Status (L/E)	Owner (Licensee/Exemptee)	Action
12664	Portsmouth Area Tidal Energy Project	-----	Piscataqua River	Portsmouth, Newington, Dover, NH/Kittery, Elliot ME	I	New Hampshire Tidal Energy Co.	Preliminary permit surrendered 03/30/2009
12666	Kennebec Tidal Energy Project	-----	Kennebec River	Bath , Woolwich	I	Maine Tidal Energy Company	Preliminary permit surrendered 05/31/2009
12668	Penobscot Tidal Energy Project	-----	Penobscot River	Bucksport, Prospect, Stockton Springs, Verona	I	Maine Tidal Energy Company	Preliminary permit surrendered
12674	Cutler Tidal Power Project	-----	Little Machias Bay	Cutler	I	Tidewater Associates	Application for Preliminary Permit withdrawn 11/21/2008
12710	Passamaquoddy Tribe HydroKinetic Project	-----	Passamaquoddy Bay and Cobscook Bay	Eastport	I	Passamaquoddy Tribe at Pleasant Point Reservation	Preliminary permit surrendered 05/26/2010
12722	Piscataqua Tidal Energy Project	-----	Piscataqua River	Portsmouth, NH/Kittery, ME	I	UEK Corporation	Preliminary permit surrendered 03/31/2009
12876	Maine 1 Project	-----	Lubec Narrows (Passamaquoddy Bay)	Lubec	I	Hydro Green Energy LLC	Preliminary permit surrendered 05/07/2009
13079	Wiscasset Tidal Energy Project	-----	Sheepscot River	Wiscasset	I	Natural Currents Energy Services LLC	Application for Preliminary Permit Rejected as deficient 06/04/2008
13140	Quoddy Roads Tidal Power Project	-----	Quoddy Narrows (Passamaquoddy Bay)	Lubec	I	Tidewalker Associates	Application for Preliminary Permit Withdrawn 11/21/2008
13144	Grand Manan Channel Tidal Power Project	-----	Grand Manan Channel	Lubec	I	Manancook Associates	Preliminary permit surrendered 10/22/2009

Inactive FERC HydroKinetic Projects in Maine - Continued

FERC Number	Project Name	Approved Capacity (KW)	River/Stream Impounded	Location (Municipality/Unorganized Township)	Status (L/E)	Owner (Licensee/Exemptee)	Action
13246	Wiscasset Tidal Energy Project	-----	Sheepscot River	Wiscasset	I	Natural Currents Energy Services LLC	Application for Preliminary Permit Withdrawn 11/25/2008
13329	Town of Wiscasset Tidal resources Project	-----	Sheepscot River	Wiscasset	I	Town of Wiscasset	Preliminary Permit expired 05/28/2012 (3 yrs after issue)
13646	Damariscotta River Tidal Energy Project	-----	Damariscotta River	Damariscotta, Newcastle	I	The Power Company, Inc.	Preliminary permit cancelled 07/28/11 (per FERC email 07/13/12)
13830	Half Moon Cove Tidal Power Plant Project		Cobscook Bay	Eastport , Perry	I	Eastport Tidal Power LLC	Competing application for Prelim Permit denied 12/03/2010 (see P-12704)

Status: A = Active. I = Inactive.

NOTE 1: Preliminary permits are issued by the Federal Energy Regulatory Commission (FERC) for a period effective the first day of the month in which the permit is issued, and ending either 36 months from the effective date or the date on which a license application submitted by the permittee has been accepted for filing, whichever comes first. The purpose of a preliminary permit is to preserve the right of the permittee to have the first priority in applying for a license for the project being studied.

NOTE 2: FERC has established expedited licensing procedures for individual hydrokinetic test projects that are proposed to be: (1) small (less than 5 MW); (2) short term (generally, 5 years or less); (3) not located in sensitive areas; (4) removable and able to be shut down on short notice; (5) removed, with the site restored, before the end of the license term, unless a new license is issued); and (6) initiated by a draft application in a form sufficient to support environmental analysis.

NOTE 3: A tidal or wave power project is subject to FERC jurisdiction if is (1) located on a navigable water of the United States, or (2) occupies land of the United States, or (3) utilizes surplus water or water power from a government dam, or (4) is located on waters which are non-navigable but over which Congress has Commerce clause jurisdiction, and project construction occurred on or after August 26, 1935, and the project affects the interests of interstate commerce.

NOTE 4: Hydrokinetic tidal or wave power devices are not subject to FERC jurisdiction if (1) the technology in question is experimental, (2) the proposed devices are utilized for short periods for the purpose of conducting studies, and (3) power generated from the devices will not be transmitted into, or displace power from, the national electric energy grid.

VII. FERC Non-Jurisdictional Projects

Non-jurisdictional projects are those that have been found to not be subject to FERC jurisdiction under the terms of the Federal Power Act.

A non-federal hydroelectric generating project must be licensed if it: (1) is located on a navigable water of the United States; or (2) occupies land of the United States; or (3) utilizes surplus water or water power from a government dam; or (4) is located on water which are non-navigable but over which Congress has Commerce Clause jurisdiction, project construction occurred on or after August 26, 1935, and the project affects the interests of interstate or foreign commerce.

FERC jurisdiction does not attach if a project is constructed, operated and maintained in accordance with the terms of a valid federal permit issued prior to June 10, 1920. A storage reservoir is subject to licensing if it is part of a complete unit of hydropower development and any part of the development is subject to licensing

The tables containing data concerning inactive FERC non-jurisdictional projects are listed below.

FERC Non-Jurisdictional Hydropower Projects in Maine

FERC Number	Project Name	Capacity (KW)	River/Stream Impounded	Location (Municipality/Unorganized Township)	Owner	Explanation for Finding of Non-Jurisdiction
UL 88-25	Estes Lake	800	Mousam	Sanford	KEI Power Management LLC	Pre-1935 Project Located on Non-Navigable Waterway
UL 88-27	Wilson Stream	700	Big Wilson Stream	Greenville	KEI Power Management LLC	Pre-1935 Project Located on Non-Navigable Waterway
UL 88-27	Wilson Pond	Storage	Big Wilson Stream	Greenville	KEI Power Management LLC	Pre-1935 Project Located on Non-Navigable Waterway
UL 88-28	Leighs Mill	500	Great Works	South Berwick	KEI Power Management LLC	Pre-1935 Project Located on Non-Navigable Waterway
UL 89-1	Grand Falls	9480	St. Croix	Baileyville	Domtar Maine LLC	Pre-Federal Power Act Congressional Authorization for Dam
UL 89-2	Woodland	11600	St. Croix	Baileyville	Domtar Maine LLC	Pre-Federal Power Act Congressional Authorization for Dam
UL 89-16	Old Falls	600	Mousam	Kennebunk	KEI Power Management LLC	Pre-1935 Project Located on Non-Navigable Waterway
UL 90-15	Norway	300	Pennesseewassee	Norway	KEI Power Management LLC	Pre-1935 Project Located on Non-Navigable Waterway
UL 94-1	Rangeley	Storage	Rangeley	Rangeley	Union Water Power Co.	Insignificant Benefit to Downstream Generation
UL 94-3	First Roach	Storage	Roach	Frenchtown Twp.	Maine Department of Inland Fisheries & Wildlife	Insignificant Benefit to Downstream Generation
UL 97-16	Moxie	Storage	Moxie	East Moxie Twp.	Owners of Moxie Dam	Insignificant Benefit to Downstream Generation (previously FERC No. 2613)

FERC Non-Jurisdictional Hydropower Projects in Maine - Continued

FERC Number	Project Name	Capacity (KW)	River/Stream Impounded	Location (Municipality/Unorganized Township)	Owner	Explanation for Finding of Non-Jurisdiction
UL 98-1	Umbazookus Lake	Storage	West Branch Penobscot	T6 R13 WELS	Great Lakes Hydro America LLC	Insignificant Benefit to Downstream Generation
	Rainbow Lake			Rainbow Twp.		
	Nesowadnehunk L.			T4 R10 WELS	Leo Purington	
UL 01-02	Mattagamon Lake	Storage	East Branch Penobscot	T6 R8 WELS	Mattagamon Lake Assoc.	Insignificant Benefit to Downstream Generation
	Telos Lake			T6 R11 WELS	Maine Department of Conservation	
UL 01-04	Schoodic Lake	Storage	Schoodic Stream	Lake View Plt.	Schoodic Lake Assoc.	Insignificant Benefit to Downstream Generation
	Seboeis Lake		Seboeis Stream	T4 R9 NWP	Maine Department of Conservation	

VIII. Other State Jurisdictional Hydropower Projects

Other State Jurisdictional Hydropower Projects in Maine

FERC Number	Project Name	Capacity (KW)	River/Stream Impounded	Location (Municipality/Unorganized Township)	Owner	Approval Information
---	Seavey Hydro	16	Ripley Stream	Ripley	Earnest Seavey	DEP Permit #L-10204 issued 07/11/1984
---	Morgan's Mills	50	Mill Stream	Union	Richard Morgan	DEP Permit #L-10750 issued 03/27/1985
---	Tidewater Hydro	10	Carvers Pond	Vinalhaven	Phillip Crossman	DEP Permit #L-20341 issued 01/09/2001 and modified 04/03/2008
---	Bradford Camps	1.4	Norway Brook	T8 R10 WELS	Igor Sikorsky	LURC Permit #HP-0023 issued 10/02/2001
---	Kates Microhydro	0.5	Stony Brook	Newry	Robert Kates	DEP Permit #L-23519 issued 05/24/2007
---	Maine Hut #1	6	Poplar Stream	Carrabassett Valley	Western Mountains Foundation	DEP Permit #L-23347 issued 06/06/2007
---	Kennebunkport Grist Mill	Hydro-mechanical	Kennebunk River	Kennebunkport	Kennebunkport Conservation Trust	DEP L-025570-32-A-N (pending)

IX. Dam Removals in Maine

Dam Removals in Maine
Status as of December 2012

	Dam Name	Location	Affected Waters	Year Removed	Notes
1	Milton Leatherboard Lower Dam	Lebanon, ME & Milton, NH	Salmon Falls River	1986	Removal confirmed by NH DES
2	Bolster's Mill Dam	Harrison & Otisfield	Crooked River	1987-88	Dam replaced with rock ramp fishway
3	Columbia Falls Dam	Columbia Falls	Pleasant River	1988	Approved hydropower project prior to removal
4	Bangor Dam	Bangor & Brewer	Penobscot River	1995	Dam was breached at time of removal NATDAM #ME00579
5	Mast Point Dam	Berwick, ME & Somersworth, NH	Salmon Falls River	1997	Removal confirmed by NH DES NATDAM #NH00128
6	Grist Mill Dam	Hampden	Souadabscook Stream	1998	Approved hydropower project prior to removal NATDAM #ME00581
7	Temple Mill Dam	Hampden	Souadabscook Stream	1999	Dam was unused at time of removal
8	Brownville Dam	Brownville	Pleasant River	1999	Dam was breached at time of removal NATDAM #ME00161
9	Edwards Dam	Augusta	Kennebec River	1999	Approved hydropower project prior to removal NATDAM #ME00081
10	East Machias Dam	East Machias	East Machias River	2000	Dam was breached at time of removal
11	Mill Dam	Corinna	East Branch Sebasticook River	2000-01	Removed as part of cleanup of Eastland Woolen Mill Superfund Site. NATDAM #ME00331
12	Sennebec Dam	Union	St. George River	2002	Dam replaced with rock ramp fishway NATDAM #ME00248
13	Main Street Dam	Newport	Sebasticook River	2002	NATDAM #ME00114
14	Smelt Hill Dam	Falmouth	Presumpscot River	2002	Approved hydropower project prior to removal
15	Sandy River Dam	Norridgewock & Starks	Sandy River	2006	Approved hydropower project prior to removal NATDAM #ME00119

Dam Removals in Maine
Status as of December 2012

	Dam Name	Location	Affected Waters	Year Removed	Notes
16	Fort Halifax Dam	Winslow	Sebastian River	2008	Approved hydropower project prior to removal NATDAM #ME00108
17	Fields Pond Dam	Orrington	Sedunkedunk Stream	2008	Dam replaced with rock ramp fishway NATDAM #ME00300
18	Sherman Lake Dam	Newcastle	Marsh River	2009	Dam was breached at time of removal, and remainder of dam was removed by owner (MDOT) to restore natural saltwater marsh. NATDAM #ME00259
19	Mill Pond Dam	Brewer	Sedgunkedunk Stream	2009	Dam formerly provided process water to Eastern Fine Paper Mill; unused at time of removal. NATDAM #ME00375
20	Little River Dam	Lisbon & Topsham	Little River	2009	Dam unused at time of removal
21	Montsweag Dam	Wiscasset & Woolwich	Montsweag Brook	2010	Dam formerly provided process water to Maine Yankee Atomic Power Plant. Dam removed by owner (Chewonki Foundation) for anadromous fish restoration. NATDAM #ME00738
22	West Winterport Dam	Winterport & Frankfort	Marsh Stream	2010	Previously approved hydropower project, inactive at time of removal. NATDAM #ME00580
23	Martin Brook Upper Dam	Madawaska	Martin Brook	2010	Dam owned by Madawaska Water District and was partially breached at time of removal. Dam removed as fisheries habitat enhancement project.
24	Great Works Dam	Old Town & Bradley	Penobscot River	2012	Previously approved hydropower project. Removal was part of Penobscot River Restoration Project. NATDAM #ME00140.
	Veazie Dam	Veazie & Eddington	Penobscot River	Proposed for removal - 2013	Currently approved hydropower project. Removal proposed as part of Penobscot River Restoration Project. NATDAM #ME00137.

Dam Removals in Maine
Status as of December 2012

	Dam Name	Location	Affected Waters	Year Removed	Notes
*	Boston Felt Dam	Lebanon, ME & Rochester, NH	Salmon Falls River		Currently approved hydropower project. Dam breached in 2006; spillway subsequently removed per order of NH DES.
*	Coopers Mills Dam	Whitefield	Sheepscot River		Dam owned by Town of Whitefield. Both dam and fishway need repairs or removal. NATDAM #ME00336
*	Gardiner Paperboard Dam	Gardiner	Cobbosseecontee Stream		Dam currently unused and blocking fish passage. Contact: Jeff Reardon (Trout Unlimited).
*	Juliet Mill Dam	Lisbon	Sabattus River		Dam owned by Miller Industries; breached in 2005. Under study for removal to restore anadromous fish habitat and passage.
*	Farwell Mill Dam	Lisbon	Sabattus River		Dam owned by Miller Industries. Under study for removal to restore anadromous fish habitat and passage.
* Currently proposed or under study for removal					

Appendix A

Listing of Relevant Statutory Sections

- 12 MRSA §§401 - 407 Maine Rivers Policy
- 12 MRSA §6121 Fishways
- 38 MRSA §§ 630 – 651 Permits for Power Projects
- 38 MRSA §§840 Water Levels
- 38 MRSA §§901 – 909 Release From Dam Ownership

Appendix B

06-096 C.M.R. ch. 450: Administrative Regulations for Hydropower Projects (Includes 04-061 Chapter 11 for the Land Use Planning Commission)

06-096 Chapter 450 & 04-061 Chapter 11: ADMINISTRATIVE REGULATIONS FOR HYDROPOWER PROJECTS

SUMMARY: The Department of Environmental Protection and the Land Use Regulation Commission have adopted joint regulations for the processing of applications for hydropower projects under the Maine Waterway Development and Conservation Act and Maine Rivers Policy. The purpose of these regulations is to provide guidance on the administration of the Act, including guidance on how the Board and Commission will interpret the provisions of the Act and the Maine Rivers Policy and will approach the judgments they must make under the criteria set forth in the Act and the Policy.

- 1. Authority.** These regulations are promulgated pursuant to the Administrative Procedure Act, 5 M.R.S.A., Chapter 375; 12 M.R.S.A., Chapter 206-A; and 38 M.R.S.A., Sec. 343-A to interpret the Maine Rivers Policy, 12 M.R.S.A., Sec. 401-405 and the Maine Waterway Development and Conservation Act, 38 M.R.S.A., Sec. 630-637.
- 2. Purpose.** In adopting the Maine Waterway Development and Conservation Act, the Legislature established "that it is the policy of the State to support and encourage the development of hydropower projects by simplifying and clarifying requirements for permits, while assuring reasonable protection of natural resources and the public interest in use of waters of the State".

The purpose of these regulations is to further this policy by providing guidance on the administration of the Act, including guidance on how the Board and Commission will interpret the provisions of the Act and the Maine Rivers Policy and will approach the judgments they must make under the criteria set forth in the Act and the Policy.

- 3. Definitions.** The following terms, as used in these regulations, shall have the following meanings, unless the context indicates otherwise:
 - A. Act.** "Act" means the Maine Waterway Development and Conservation Act, 38 M.R.S.A., Sec. 630-637.
 - B. Board.** "Board" means the Board of Environmental Protection.
 - C. Commission.** "Commission" means the Land Use Regulation Commission of the Maine Department of Conservation.
 - D. Commissioner.** "Commissioner" means the Commissioner of the Department of Environmental Protection.
 - E. Department.** "Department" means the Department of Environmental Protection.

F. Director. "Director" means the Director of the Land Use Regulation Commission.

G. Hydropower Project or Project. "Hydropower project, or project," means any development which utilizes the flow of water as a source of electrical or mechanical power, or which regulates the flow of water for the purpose of generating electrical or mechanical power. A hydropower project development includes all powerhouses, dams, water conduits, transmission lines, water impoundments, roads and other appurtenant works and structures that are part of the development. (38 M.R.S.A., Sec. 632.3)

H. Mitigation. "Mitigation" means any action taken or not taken to avoid, minimize, rectify, reduce, eliminate, or compensate for actual or potential adverse environmental impacts. Such actions include, but are not limited to:

- (1) Avoiding an impact altogether by not taking a certain action or parts of an action;
- (2) Minimizing an impact by limiting the magnitude or duration of an activity or by controlling the timing of an activity;
- (3) Rectifying an impact by repairing, rehabilitating, or restoring the affected environment;
- (4) Reducing or eliminating an impact over time through preservation and maintenance operations during the life of the project; and
- (5) Compensating for an impact by replacing affected resources or environments or providing substitute resources or environments.

4. Permit Requirements

A. Prohibition. The Maine Waterway Development and Conservation Act (38 M.R.S.A., Sec. 633) states "No person may initiate construction or reconstruction of a hydropower project, or structurally alter a hydropower project in ways which change water levels or flows above or below the dam, without first obtaining a permit from the (Board or Commission). Normal maintenance and repair of an existing and operating hydropower project shall be exempt from (the requirement for a permit) provided that:

- (1) The activity does not involve any dredging or filling below the normal high-water line of any great pond, coastal wetland, river, stream or brook; and
- (2) The activity does not involve any dredging or filling on the land adjacent to any great pond, coastal wetland, river, stream or brook such that any dredged spoil, fill or structure may fall or be washed into those waters."

B. Activities Requiring a Permit. The following types of activities, by way of example, are subject to the requirement for a permit:

- (1) The construction of a new hydropower project, including a new water storage dam, or a new hydroelectric generating facility of any kind, whether utilizing a dam, a natural water feature, natural current velocities, or tidal action;
- (2) The reconstruction of a hydropower project;

- (3) The structural alteration of a hydropower project in ways which change water levels or flows above or below the dam, including, but not limited to:
 - (a) The addition or alteration of flashboards; and
 - (b) The installation of additional or enlarged turbines; and
- (4) Any dredging or filling below the normal high-water line of a water body to facilitate maintenance and repair of an existing and operating hydropower project.

C. Activities Not Requiring a Permit. The following types of normal maintenance and repair activities at existing and operating hydropower projects, by way of example, are specifically exempt from the requirement for a permit, provided that the activity does not diminish water quality below applicable standards:

- (1) The resurfacing or repair of dams, canals, powerhouses, retaining walls, or other structures where no cofferdam, dredging, filling, or permanent water level alteration is involved;
- (2) The repair, removal or replacement of flashboards, stop logs, gates, or intake racks where no cofferdam, dredging, filing, or permanent water level alteration is involved;
- (3) Removal of materials collected on trash racks;
- (4) Removal of dri-ki and other accumulated materials where no significant disturbance of soils or lake or river bottom materials is involved;
- (5) Installing or removing booms;
- (6) Placement and removal of non-earthen cofferdams temporarily installed immediately adjacent to an existing structure for the purpose of inspecting or repairing the structure;
- (7) Removal of sediment and debris from gated canals, tunnels and penstocks from which the water has been removed; and
- (8) Sealing of leaks in gates, stop logs and flashboards.

D. Jurisdiction. The Board or Commission acquires jurisdiction under the Maine Waterway Development and Conservation Act when a person either files an application to construct, reconstruct, or structurally alter a hydropower project, or initiates the unapproved construction, reconstruction, or structural alteration of a hydropower project, as defined by 38 M.R.S.A., Sec. 632.3 and Sec. 633 and these regulations.

5. Standard of Review

A. Maine Waterway Development and Conservation Act. The Maine Waterway Development and Conservation Act, 38 M.R.S.A., Sec. 636, states that the Board or Commission shall approve a project when it finds that the applicant has demonstrated that seven criteria have been met. The criteria are as follows:

- (1) Financial capability. The applicant has the financial capability and technical ability to undertake the project. In the event that the applicant is unable to demonstrate financial capability, the (Board or Commission) may grant the permit contingent upon the applicant's demonstration of financial capability prior to commencement of activities permitted. (38 M.R.S.A., Sec. 636.1)
- (2) Safety. The applicant has made adequate provisions for protection of public safety. (38 M.R.S.A., Sec. 636.2)
- (3) Public benefits. The project will result in significant economic benefits to the public, including, but not limited to, creation of employment opportunities for workers of the State. (38 M.R.S.A., Sec. 636.3)

To meet this criterion, the applicant must demonstrate that the benefits claimed from the proposed project are real, in that these benefits would not result but for the project. Further, the applicant must demonstrate that the project's economic benefits are greater than its economic costs, and that the resulting net benefit is significant.

"Benefit" is a term which requires a comparison between at least two conditions. Further, this section of the law calls for the Board and Commission to judge if the benefits are 'significant'. This too is a comparative term which can only be reasonably evaluated in light of other courses of action which might reasonably be pursued. Therefore, in order to accurately evaluate the existence and extent of the economic benefits that may result from a proposed hydropower project, it is necessary to compare two alternative futures: the economic conditions likely to exist if the project is built versus those likely to exist without the project.

NOTE: Experience has shown that the vast majority of projects have resulted in significant public economic benefits. This is because these relatively small projects at existing dams have lacked any substantial public economic costs, and the most likely alternative has been continued oil fired generation. However, a small number of projects have required a more thorough analysis of what was likely to happen if these projects were not built. Experience has also shown that these have been new dams which would have resulted in substantial public economic costs.

In cases involving new dams which would result in substantial economic costs, the consideration of alternatives is not limited to continued oil-fired generation; therefore, a demonstration that this criterion has been met must include comparing the benefits claimed from the project against the economic conditions that would otherwise result from any alternative source(s) of energy generation or conservation that might reasonably be pursued in the event that the project is not built.

Economic benefits and costs will be identified and measured using generally accepted methods and procedures, such as those published by the United States Water Resources Council. In accordance with these methods and procedures, economic benefits may include, but are not limited to, increases in the income or purchasing power of Maine citizens, energy security from reducing dependence upon fossil fuels, and creation of employment opportunities for workers of the State.

Similarly, in accordance with these methods and procedures, economic costs may include, but are not limited to, decreases in the income or purchasing power of Maine citizens, the value of other hydroelectric generating opportunities diminished or eliminated by a project, and the elimination of employment opportunities for workers of the State.

- (4) Traffic movement. The applicant has made adequate provision for traffic movement of all types out of or into the development area. (38 M.R.S.A., Sec. 636.4)
- (5) Maine Land Use Regulation Commission. Within the jurisdiction of the Maine Land Use Regulation Commission, the project is consistent with zoning adopted by the commission. (38 M.R.S.A., Sec. 636.5)

A proposal is consistent with such zoning if the proposed hydropower project, or portions of that project, as occur within the Commission's jurisdiction, are not prohibited uses under the zoning designation and standards in effect at the time of consideration as set forth in Chapter 10 of the Commission's Rules and Regulations.

In those instances where the project, or portions of that project, are prohibited uses under the zoning designation and standards in effect at the time of consideration, the applicant must file and obtain favorable action from the Commission on a rezoning petition or must amend the project to avoid conflicts with the Commission's zoning in order to satisfy this criterion.

- (6) Environmental mitigation. The applicant has made reasonable provisions to realize the environmental benefits of the project, if any, and to mitigate its adverse environmental impacts. (38 M.R.S.A., Sec. 636.6)

Mitigation is not necessarily limited to the replacement of affected resources or environments (i.e., in-kind or on-site mitigation) but may involve the provision of substitute resources or environments (i.e., out-of-kind or off-site mitigation). In-kind or on-site mitigation measures will be preferred. Off-site or out-of-kind measures may be acceptable where in-kind or on-site measures are demonstrated not to be feasible or desirable.

Whether an applicant's provisions to realize environmental benefits or to mitigate adverse environmental impacts are reasonable depends in part upon the significance of the resource(s) affected.

- (7) Environmental and energy considerations. The advantages of the project are greater than the direct and cumulative adverse impacts over the life of the project based upon the following considerations:

NOTE: Significant cumulative adverse impacts are harms to the environment which add to the impacts of other existing, facilities or uses such that a threshold of acceptability for the total impact is exceeded. For example, when viewed in isolation, a particular project might be seen as having only a minor on-site impact on water quality, e.g., a slight reduction in dissolved oxygen or a slight reduction in a run of anadromous fish. However, even minor reductions in dissolved oxygen at the site to levels well above the minimum acceptable standard might cause downstream areas affected by other existing projects or discharges to violate water quality standards. Likewise, a seemingly small reduction in the number of salmon (say 10 percent loss at the project in question) might,

when combined with the effects of other existing dams, cause a run to fail because the number of fish needed to sustain a breeding population was not maintained.

- (a) Whether the project will result in significant benefit or harm to soil stability, coastal and inland wetlands or the natural environment of any surface waters and their shorelands;
- (b) Whether the project will result in significant benefit or harm to fish and wildlife resources. In making its determination, the (Board or Commission) shall consider other existing uses of the watershed and fisheries management plans adopted by the Department of Inland Fisheries and Wildlife, the Department of Marine Resources, and the Atlantic Sea Run Salmon Commission;
- (c) Whether the project will result in significant benefit or harm to historic and archaeological resources;
- (d) Whether the project will result in significant benefit or harm to the public rights of access to and use of the surface waters of the State for navigation, fishing, fowling, recreation and other lawful public uses;
- (e) Whether the project will result in significant flood control benefits or flood hazards; and
- (f) Whether the project will result in significant hydroelectric energy benefits, including the increase in generating capacity and annual energy output resulting from the project, and the amount of nonrenewable fuels it would replace.
- (g) For an application filed after July 16, 1986, whether there is reasonable assurance that the project will not violate applicable water quality standards, as required for water quality certification under the United States Water Pollution Control Act, Section 401.

The (Board or Commission) shall make a written finding of fact with respect to the nature and magnitude of the impact of the project on each of the considerations under this (criterion), and a written explanation of their use of these findings in reaching their decision. (38 M.R.S.A., Sec. 636.7)

The benefits of a project need not be greater than its harms for each of the specified environmental and energy considerations in order for this overall criterion to be satisfied. Therefore, this criterion has been met if, in the Board's or Commission's judgment, the applicant has demonstrated that the weight of the advantages of the project is greater than the weight of the direct and cumulative adverse impacts over the life of the project based upon the specified environmental and energy considerations.

Determining whether the advantages of the project are greater than its adverse impacts requires attaching value or weight to the project's various benefits and harms.

NOTE: Experience has shown that this weighing has not been difficult for the vast majority of projects as no substantial adverse environmental impacts would have occurred to be balanced against the energy benefits of these projects. However, a small number of projects have required a more thorough analysis. Experience has also shown that these have been new dams with substantial adverse impacts.

In cases involving new dams which would result in substantial adverse impacts, the consideration of alternatives is not limited to continued oil-fired generation; therefore, a demonstration that this criterion has been met must include a description of the environmental and energy benefits and harms of the proposed project in comparison with the benefits and harms that would result from any alternative source(s) of energy generation or conservation that might reasonably be pursued in the event that the project is not built.

B. The Maine Rivers Policy: Special Protection for Outstanding River Segments. 12 M.R.S.A., Sec. 403, declares that certain river and stream segments, designated as outstanding rivers, are to be accorded special protection, by virtue of their unparalleled natural and recreational values. This special protection takes the following form:

"No license or permit under Title 38, Sections 630 to 636, may be issued for the construction of new dams on the river and stream segments subject to this special protection without the specific authorization of the Legislature, or for additional development or redevelopment of existing dams on the river or stream segments subject to this special protection where the additional development or redevelopment diminishes the significant resource values of these river and stream segments."

The outstanding river segments are identified in 12 M.R.S.A., Sec. 403. The significant resource values of the special protection rivers are those identified by the 1982 Maine Rivers Study, as provided in 12 M.R.S.A., Sec. 403.

Based on this special protection, the Board or Commission can only approve a permit pursuant to the Act for a new dam on an outstanding river segment where (1) the Legislature specifically authorizes the Board or Commission to consider such a permit and (2) the Board or Commission then finds that the project meets the criteria of 38 M.R.S.A., Sec. 636, as outlined in subsection A above.

Similarly, the Board or Commission can only approve a permit pursuant to the Act for the additional development or redevelopment of an existing dam on an outstanding river segment where (1) the Board or Commission finds that the project does not diminish the significant resource values of the outstanding river segment, and (2) the Board or Commission further finds that the project meets the criteria of 38 M.R.S.A., Sec. 636, as outlined in subsection A above.

In determining whether or not significant resource values identified by the Maine Rivers Study will be diminished, the Board or Commission will not consider measures proposed to replace or substitute for losses.

For the purposes of 12 M.R.S.A., Sec. 403, "existing dams on the river or stream segments subject to special protection" shall mean man-made barriers across the outstanding river segments identified in 12 M.R.S.A., Sec. 403, which impound water and which, as of June 17, 1983, had not been breached, deteriorated, or modified to the point where they no longer impounded water at or near their design level at normal flows.

For the purposes of 12 M.R.S.A., Sec. 403, "additional development or redevelopment of existing dams on a river or stream segment subject to special protection" shall mean any activities associated with the installation, reinstallation or expansion of hydroelectric or hydromechanical generating capacity at existing dams, as defined above, that do not result in any increase in water

levels above these dams or any dewatering of river segments below these dams except during construction.

Dams located at the outlet of lakes or ponds specifically identified in 12 M.R.S.A., Sec. 403 shall not be considered to be on the outstanding river segments.

6. Administering Agency. The Act shall be administered by the Land Use Regulation Commission within its jurisdiction, including the unorganized townships, plantations and certain organized towns, and by the Board of Environmental Protection elsewhere in the State.

In the event a proposed project and areas directly affected by the project overlap the jurisdictions of the Board and Commission, permitting jurisdiction pursuant to the Act shall be determined as follows:

- A. Where the proposed construction, reconstruction, or structural alteration activities occur solely within one agency's jurisdiction, that agency shall be the permitting agency.
- B. Where the proposed construction, reconstruction, or structural alteration activities occur within the jurisdictions of both agencies, or where water is diverted in one jurisdiction and other project facilities are located in the other jurisdiction, a case-by-case determination shall be made by the two agencies as to which will administer the permitting process.

Where a proposed project and areas directly affected by the project overlap the State's boundaries, to the extent possible, a joint review of the project will be conducted by the Board or Commission and the agency having similar jurisdiction within the other state or Canadian Province.

7. Information Requirements. To receive a permit, every applicant must demonstrate that the criteria of 38 M.R.S.A., Sec. 636 have been met. In all cases, such information shall be required as is deemed necessary by the Board, Commission or their staffs to describe the proposed project and its impacts in sufficient detail to enable the Board, Commission or their staffs to make an informed judgment on a particular project.

Where information required by the Board, Commission, or their staffs is contained in an Application for License or Exemption or an Application for Amendment of License or Exemption for a hydropower project that has been or is being filed with the Federal Energy Regulatory Commission (FERC), that information may be submitted as complete or partial fulfillment of these information requirements.

Because of the differing nature of every project proposed for approval, an applicant is advised to consult with staff of the Commission or Department (whichever is applicable) prior to submitting an application.

8. Process and Time Limits for Decisions

- A. **Commissioner or Director Action.** For those applications delegated* to the Commissioner of the Department of Environmental Protection or the Director of the Land Use Regulation Commission, the Commissioner or Director shall make a decision as expeditiously as possible, and shall within 60 working days of receipt of a properly completed application, either:

- (1) Approve the proposed project upon such terms and conditions as are appropriate and reasonable to protect and preserve the environment and the public's health, safety and general welfare, including the public interest in replacing oil with hydroelectric energy; (38 M.R.S.A., Sec. 635); or
- (2) Disapprove the proposed project, setting forth in writing the reasons for the disapproval; (38 M.R.S.A., Sec. 635); or
- (3) Refer the proposed project to the Board or Commission, as appropriate, in which case the Board's or Commission's decision shall be reached within 105 working days of the agency's receipt of the completed application.

NOTE: Delegation of authority to the Commissioner of the Department of Environmental Protection to make decisions pursuant to the Act is provided for in Chapter I of the Department's Regulations. Delegation of authority to the Director of the Land Use Regulation Commission to make certain decisions pursuant to the Act is provided for by Commission action.]

B. Board or Commission Action. Upon receipt of a properly completed application, the Board or Commission shall either:

- (1) Approve the proposed project upon such terms and conditions as are appropriate and reasonable to protect and preserve the environment and the public's health, safety and general welfare, including the public interest in replacing oil with hydroelectric energy;
- (2) Disapprove the proposed project, setting forth in writing the reasons for the disapproval; or
- (3) Schedule a hearing on the proposed project. Any hearing held under this subsection shall follow the notice requirements and procedures for an adjudicatory hearing under Title 5, Chapter 375, subchapter IV. After any hearing is held under this subsection, the Board (or Commission) shall make findings of facts and issue an order approving or disapproving the proposed project, as provided in subsections 1 and 2. (38 M.R.S.A., Sec. 635.)

The Board or Commission shall make its decision as expeditiously as possible but in no case will the decision be later than 105 working days after acceptance of the application, except as provided in subsection C.

C. Waiver of Time Limits. The Act provides that, following one extension of up to 45 working days, the time limit requirement for decisions may be waived by the Commissioner or Director only at the request of the applicant.

D. Action on Water Quality Certification

[DEP NOTE: The provisions of this sub-section have been superseded by P.L. 1989 Chapter 309, which revised 38 M.R.S.A. Sec. 634.1, repealed 38 M.R.S.A. Sec. 363-C, and enacted 38 M.R.S.A. Sec. 635-B.]

As provided by 38 M.R.S.A., Sec. 634.1, the issuance of a water quality certificate, as required under the United States Water Pollution Control Act, Sec. 401, shall be mandatory in every case where the Board or Commission approves an application for a hydropower project permit under

the Act, except in those cases where the Board or Commission has found that the applicant has not demonstrated that the project will not result in significant harm to water quality or will not violate applicable water quality standards.

The Commissioner or Director, as appropriate, shall act to issue or deny water quality certification within 5 working days following the decision by the Board or Commission to approve or disapprove a proposed project pursuant to 38 M.R.S.A., Sec. 636. Such action shall be based solely on the finding of the Board or Commission pursuant to 38 M.R.S.A., Sec. 636.7(G), as to whether there is a reasonable assurance that the project will not violate applicable water quality standards.

As provided by 38 M.R.S.A., Sec. 363-C, the waters of a new or proposed hydroelectric impoundment shall be deemed to be Clasp GP-A, if the Commissioner finds that it is reasonably likely that the impoundment would : (1) thermally stratify; (2) exceed 30 acres in surface area; and (3) not have any upstream direct discharges except cooling water. The Commissioner shall notify the Board or Commission, as appropriate, of any classification determination made pursuant to this statutory provision as soon as sufficient information is available to make such a determination.

9. Terms and Conditions of Approval

A. Authority. The Act provides that the Board or Commission may approve "the proposed project upon such terms and conditions as are appropriate and reasonable to protect and preserve the environment and the public's health, safety and general welfare, including the public interest in replacing oil with hydroelectric energy. These terms and conditions may include, but are not limited to:

- (A) Establishment of a water level range for the body of water impounded by a hydropower project;
- (B) Establishment of instantaneous minimum flows for the body of water affected by a hydropower project; and
- (C) Provisions for the construction and maintenance of fish passage facilities.

In those cases where the proposed project involves maintenance, reconstruction or structural alteration at an existing hydropower project and where the proposed project will not alter historic water levels or flows after its completion, the (Board or Commission) may impose temporary terms and conditions of approval relating to paragraph A or paragraph B but shall not impose permanent terms and conditions that alter historic water levels or flows. (38 M.R.S.A., Sec. 635.1)

B. Nature of Terms and Conditions. Such case-specific terms and conditions as may be placed by the Board or Commission on its approval of a proposed project shall specify particular means of satisfying minor or easily corrected problems, or both, relating to compliance with the Act and shall not substitute for or reduce the burden of proof of the applicant to demonstrate to the Board or Commission that each of the standards of the Act has been met.

C. Standard Conditions of Approval. Unless otherwise specifically stated in the approval, all Board, Commissioner, Commission, and Director approvals shall be subject to the following standard conditions:

- (1) Limits of Approval. This approval is limited to and includes the proposals and plans contained in the application and supporting documents submitted and affirmed to by the applicant. All variances from the plans and proposals contained in said documents are subject to the review and approval of the Board or Commission prior to implementation.
- (2) Noncompliance. Should the project be found, at any time, not to be in compliance with any of the conditions of this approval, or should the permittee construct or operate this project in any way other than specified in the application or supporting documents, as modified by the conditions of this approval, then the terms of this approval shall be considered to have been violated.
- (3) Compliance with all Applicable Laws. The permittee shall secure and appropriately comply with all applicable federal, state and local licenses, permits, authorizations, conditions, agreements, and orders prior to or during construction and operation.
- (4) Inspection and Compliance. Authorized representatives of the Board, Commission or the Attorney General shall be granted access to the premises of the permittee at any reasonable time for the purpose of inspecting the construction or operation of the project and assuring compliance by the permittee with the conditions of this approval.
- (5) Initiation and Completion of Construction. If construction is not commenced within 3 years and completed within 7 years from the date of issuance of this permit, this approval shall lapse, unless a request for an extension of these deadlines has been approved by the Board or Commission.
- (6) Construction Schedule. Prior to construction, the permittee shall submit a final construction schedule for the project to the Commissioner or Director.
- (7) Approval Included in Contract Bids. A copy of this approval must be included in or attached to contract bid specifications for the project.
- (8) Approval Shown to Contractor. Work done by a contractor pursuant to this approval shall not begin before a copy of this approval has been shown to the contractor by the permittee.
- (9) Notification of Project Operation. The permittee shall notify the Commissioner or Director of the commencement of commercial operation of the project within 10 days prior to such commencement.
- (10) Assignment or Transfer of Approval. This approval shall expire upon the assignment or transfer of the property covered by this approval unless written consent to transfer this approval is obtained from the Board or Commission. To obtain approval of transfer, the permittee shall notify the Board or Commission 30 days prior to assignment or transfer of property which is subject to this approval. Pending Board or Commission determination on the application for a transfer or assignment of ownership of this approval, the person(s) to whom such property is assigned or transferred shall abide by all of the terms and conditions of this approval. To obtain the Board's or Commission's approval of transfer, the proposed

assignee or transferee must demonstrate the financial capability and technical ability to (1) comply with all terms and conditions of this approval and (2) satisfy all other applicable statutory criteria.

A "transfer" is defined as the sale or lease of property which is the subject of this approval, or the sale of 50 percent or more of the stock of or interest in a corporation or a change in a general partner of a partnership which owns the property subject to this approval.

10. Access to the Site. The filing of an application for approval of a development pursuant to 38 M.R.S.A., Sec. 633, constitutes the granting of permission by the applicant to allow Board or Commission members and their staffs, and others authorized by the Board or Commission access to the site of the proposed development in order to facilitate review of such application.

11. Severability. The provisions of this Chapter are severable. If a section, sentence, clause, or phrase of this Chapter is adjudged by a court of competent jurisdiction to be invalid, such decision shall not affect the validity of the remaining portions of this Chapter.

AUTHORITY: 5 M.R.S.A., Chapter 375
 12 M.R.S.A., Chapters 200 and 206-A
 38 M.R.S.A., Sec. 343-A and Sec. 630-637

EFFECTIVE DATE: September 28, 1987 (91 days after the adjournment of the First Regular Session of the 113th Maine Legislature, as provided by 38 M.R.S.A., Sec. 637.)

EFFECTIVE DATE (ELECTRONIC CONVERSION): May 4, 1996

CORRECTION: January 13, 2000 - removed Section 5(A)(8) as never formally adopted; restored 5(A)(7)(g) from original paper adoption.

Appendix C

Dam Removal Permitting Process

STATE

- Removal of hydropower generating or storage dams needs a permit under the Maine Waterway Development and Conservation Act, the State's one-stop hydropower permitting statute.
 - The permit process is administered by DEP in organized towns and cities and by LUPC in unorganized territories.
 - Approval criteria include (a) making adequate provisions for financial capability and technical capability, public safety and traffic movement, and for mitigating adverse environmental impacts, (b) assuring that water quality standards will be met, and (c) weighing the benefits and harm to wetlands, soil stability, fish and wildlife resources, historic and archaeological resources, public rights of access and use of surface waters, flooding, and power generation.
- Removal of non-hydropower dams needs a Natural Resources Protection Act permit from DEP in organized towns and cities or a development permit from LUPC in unorganized territories.
 - Approval criteria under the LUPC law include meeting applicable land use standards and assuring there will be no undue adverse impact on existing uses, scenic character, and natural and historic resources.
 - Approval criteria under the NRPA are limited to assuring that the activity will not unreasonably interfere with existing uses, cause flooding, lower water quality, or harm aquatic or wildlife habitat. Under limited circumstances, dam removal can be approved under Permit-By-Rule Standards as a habitat creation or enhancement or water quality improvement project.

LOCAL

- Dam removal is subject to approval under applicable local shoreland zoning ordinances and development/demolition standards. In many cases, no local approvals of any kind will be needed.

FEDERAL

- Dam removal in navigable waters (all tidewaters and the main stem Kennebec and Penobscot Rivers) or involving the placement of temporary or permanent fill in any waters or wetlands needs a permit from the U.S. Army Corps of Engineers.
- Removal of approved hydropower generating or storage dams needs to be approved by the Federal Energy Regulatory Commission.

Appendix D

Abandoned Dam Procedures

38 MRSA Sections 901-908 establishes a voluntary process for a dam owner to be released from dam ownership or water level maintenance. To qualify a dam must (1) impound a river, stream or great pond, (2) be at least 2 feet high, and (3) impound at least 15 acre-feet of water. The logic behind the law is that, if an owner no longer wants or can afford to keep a dam, then the dam should either be owned by someone else who wants it or it should be breached. Increasingly, dams are owned by the storefront property owners or municipalities who most directly benefit from a dam and its operation.

1. To initiate the abandonment process, a dam owner must file a petition with the Department of Environmental Protection.

Before filing a petition, the dam owner must publish a notice in an area newspaper and mail a notice to abutting property owners. The dam owner must also make a good faith effort to notify local, regional and statewide private organizations whose interests in fisheries, wildlife, conservation, recreation and environmental issues may be affected by the dam.

2. Within 15 days, the DEP must determine whether to accept the petition as complete. To be complete, a petition must include: the name, address and phone number of the dam owner; a map showing the location of the dam; a plan of the dam; and a description of the condition of the dam and its recent operation. Any incomplete petition will be returned to the dam owner.

3. After filing a petition, the dam owner must consult with the following parties to determine whether any of them wish to assume ownership of the dam:

- Persons owning property abutting the dam, the impoundment, or the waterway immediately below the dam;
- The Departments of Conservation and Inland Fisheries & Wildlife and the Maine Emergency Management Agency;
- Any municipality or, as appropriate, the county commissioners of any unorganized area in which the dam or impoundment is located; and
- Any Indian tribe in whose territory a dam or impoundment is located.

4. Within 60 days of notification, any municipality or, as appropriate, the county commission of any unorganized area in which the dam or impoundment is located, must hold a public meeting to consider and act on the issue of municipal or county ownership of the dam.

5. Within 180 days after filing a petition, the dam owner must either withdraw the petition or file a report with the DEP. The report must include:

- Evidence of compliance with all notice requirements;
- Identity of all persons and parties notified of the petition;
- Identity of all persons and parties consulted about ownership of the dam; and
- The results of consultations and whether a new owner has been found.

At the request of a dam owner or municipality, the reporting deadline will be extended by DEP for an additional 180 days.

6. After reviewing the report, the DEP will allow the dam owner a reasonable period of time to correct any deficiencies. DEP will reject any petition found to be deficient and not corrected in a reasonable period of time.

7. If a new owner has not been found during the consultation process, the DEP will notify, in turn, DIF&W, DOC and MEMA and will request an assessment of the public value of the dam. If any one of these agencies determines that the best interest of the public requires that it assume ownership of the dam, then the DEP shall issue an order directing the dam owner to transfer ownership to that agency.

In considering public ownership, the agencies must consider the cost of maintaining the dam, the value of maintaining the dam, and the value of removing the dam. The agencies shall have up to 60 days to consider the following values:

- DIF&W—value to fisheries and wildlife.
- DOC—value to public recreation, conservation and public use.
- MEMA—value to public safety, particularly flood protection.

8. If a new owner is not found after the assessment of the public value of a dam, the DEP must provide notice in an area newspaper and directly to any affected municipality, county commissioners, and Indian tribe that no new owner has been found and that the DEP is preparing to issue an order requiring that the dam be breached or removed.

9. After a 30-day notice period, and assuming that no new owner has been found, the DEP must issue an order requiring that the dam be breached or removed.

10. A dam owner is not prohibited from requesting payment for a dam. However, in order to receive a DEP order to breach or remove a dam, a dam owner must be willing to give a dam away at no cost. When a dam is transferred through this process, the dam owner must transfer all property rights necessary to maintain and operate the dam.

Appendix E

Appendix E is the text of 37-B M.R.S.A. § 1119. At Section 4, if it is determined that a dam, based on an inspector's report and evidence gathered at a review conference, constitutes a threat to public safety, due to its integrity, structural stability, function or operation, then the Commissioner for the Department of Defense, Veterans and Emergency Management, may require the breach or removal of that dam.

§1119. Dam condition inspection

1. Inspections. A state dam inspector shall conduct an inspection of all high and significant hazard potential dams to determine whether the integrity, structural stability, function or operation of those dams constitutes a threat to public safety, in accordance with the following schedule:

- A. All significant hazard potential dams, at least once every 4 years;
- B. All high hazard potential dams, at least once every 2 years;
- C. Any dam, within 30 days of a request for an inspection from the dam owner or the municipality in which the dam is located; and
- D. At any time any dam that may, in the judgment of the commissioner, constitute a potential risk to public safety.

Notwithstanding the schedule outlined in this subsection, a state dam inspector shall conduct an inspection of a significant or high hazard potential dam within 30 days of receipt by the commissioner of a notice of transfer of ownership of the dam as required under section 1128 unless the dam has been inspected under this subsection within 4 years preceding the notice of transfer of ownership.

2. Condition report. After the on-site dam inspection, a state dam inspector shall provide a condition report to the commissioner detailing the operation and material condition of the dam and recommending all necessary remedial measures. The commissioner shall send a copy of the state dam inspector's condition report by certified mail to the dam owner, lessee or other person in control of the dam, the municipality in which the dam is located and the emergency management director of the county in which the dam is located if the condition report recommends any necessary remedial measures. The dam owner, lessee or other person in control of the dam must notify the commissioner within 20 days of receipt of the report if the owner disagrees with the findings and recommendations of the report. The dam owner, lessee or other person in control of the dam must provide the basis of disagreement to the commissioner within 3 months of receipt of the inspector's report. The dam owner, lessee or other person in control of the dam may apply for and be granted an extension of this deadline for good cause, but not for more than an additional 3 months.

3. Review conference. After receiving the inspector's report and prior to issuing any dam safety order, the commissioner shall hold a review conference and shall invite the emergency management director of the county in which the dam is located to the review conference as well as representatives from appropriate state agencies, which may include the Department of Agriculture, Conservation and Forestry, the Department of Environmental Protection, the Department of Inland Fisheries and Wildlife, the Department of Marine Resources, the Department of Public Safety, the

Department of Transportation and the Maine Land Use Planning Commission, to discuss the public safety, environmental, economic and other concerns relating to the dam and the necessary remedial measures under consideration. A state dam inspector shall attend the review conference. The commissioner shall maintain a written record of the conference and shall make a copy of this record available to all parties participating in the conference.

4. Order. The commissioner shall consider the inspector's report, the evidence presented by the dam owner, lessee or other person in control of the dam and the record from the review conference before issuing a dam safety order directing that necessary remedial measures be undertaken by the dam owner, lessee or other person in control of the dam. The commissioner may issue such an order only if the commissioner determines that the integrity, structural stability, function or operation of the dam constitutes a threat to public safety. Necessary remedial measures may include, but are not limited to:

- A. Breach or removal of the dam;
- B. Repair or maintenance of the dam in a specified manner;
- C. Operation of the dam in a specified manner;
- D. Preparation of and adherence to any emergency action that is approved by the commissioner; and
- E. Maintenance of appropriate records relating to water levels, dam operation and dam maintenance.